

Q22 a program for analyzing data from the sensory electronics and controlling the injection-molding machine and the sensory electronics in response to the sensory electronics data; and

means for displaying information, said display means being in communication with said computer,

wherein the sensory electronics are functionally communicatable with said data interface of said computer, and wherein the injection-molding machine is functionally communicatable with said data interface of said computer.

Q3 10. The integrated controller of Claim 8, wherein said data interface of said computer is a port.

Q4 13. The integrated controller of Claim 8, wherein said computer has a first data interface and a second data interface, wherein the sensory electronics are functionally communicatable with said first data interface of said computer, and wherein the part-forming machine is functionally communicatable with said second data interface of said computer.

Q5 16. An integrated controller comprising a machine controller, sensory electronics and a user interface, for use with a part-forming machine, comprising:

a computer having a data interface;

sensory electronics in communication with said data interface of said computer, said sensory electronics outputting sensory data to said computer via said data interface;

a program for analyzing said sensory data from said sensory electronics and controlling the part-forming machine and said sensory electronics in response to said sensory data; and

means for displaying information, said display means in communication with said computer, wherein said sensory electronics functionally communicates with said data interface of said computer, and wherein the injection-molding machine is functionally communicatable with said data interface of said computer.

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17. The integrated controller of Claim 16, wherein said sensory electronics is at least one vision sensor.

18. The integrated controller of Claim 16, wherein said sensory electronics is at least one infrared sensor.

19. The integrated controller of Claim 16, wherein said sensory electronics is at least one air pressure sensor.

20. The integrated controller of Claim 16, wherein said sensory electronics is at least one vacuum sensor.

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21. ~~The integrated controller of Claim 16, wherein said sensory electronics is at least one ultrasonic sensor.~~

25. The method of integrated control of a part-forming machine, comprising the steps of:

a. having at least one user-interface and using integrated sensory electronics to collect data regarding the condition of the part-forming machine;

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b. communicating said data with a computer having a program to analyze said data and to generate data commands for controlling the part-forming machine; and

c. communicating said data commands to the part-forming machine.

26. The method of integrated control of a part-forming machine of Claim 25, further comprising the step of:

d. utilizing an integrated machine controller to control the part-forming machine.

27. The method of integrated control of a part-forming machine, comprising the steps of:

a. using an integrated machine controller and integrated sensory electronics to collect data regarding the condition of the part-forming machine;

b. communicating said data with a computer having a program to analyze said data and to generate data commands for controlling the part-forming machine; and

c. communicating said data commands to the part-forming machine.

28. An integrated controller, having machine controller, sensory electronics and a user-interface, for use with a part-forming machine, comprising:

a computer having a data interface;

sensory electronics in communication with said data interface of said computer, said sensory electronics outputting sensory data to said computer via said data interface;

a program for analyzing said sensory data from said sensory electronics and controlling the part-forming machine and said sensory electronics in response to said sensory data; and

means for displaying information, said display means in communication with said computer,

wherein said sensory electronics functionally communicate with said data interface of said computer, wherein said sensory electronics are capable of determining the presence and/or absence and quality of the

formed part, and wherein the injection-molding machine is functionally communicatable with said data interface of said computer.

29. An integrated controller having sensory electronics and at least one user-interface, for use with a part-forming machine, comprising:

a computer having at least one data interface;

a program for controlling the part-forming machine; and

a program for analyzing data from the sensory electronics and for communicating with said part-forming machine program, wherein said sensory electronics are functionally communicatable with said at least one data interface of said computer, wherein said sensory electronics are capable of determining the presence and/or absence and quality of the part, and wherein the part-forming machine is functionally communicatable with said at least one data interface of said computer.

30. The integrated controller of Claim 29, further comprising means for displaying information, said display means being in communication with said computer.

31. The integrated controller of Claim 29, wherein said computer has a first data interface and a second data interface, wherein the sensory electronics are functionally communicatable with